

### 3.2 CUMBERLAND RIVER STONES RIVER – EAST FORK



## DESCRIPTION and EXTENT OF PROBLEM

According to the 1998 303(d) List more than 70 miles are partially supporting while more than 10 miles are not supporting in the Stones River – East Fork because of agriculture and construction practices. As the city of Murfreesboro grows through the East Fork subwatershed, the remediation will need to shift away from agriculture and concentrate on construction and urban runoff. An agricultural effort will set the stage for additional and more extensive remediation and prevention efforts addressing these two nonpoint source issues.

#### 1998 303(d) LIST

##### WATERSHED NAME

East Fork-Wades Branch

East Fork-Bear Branch

East Fork-Cripple Creek

East Fork-McKnight & Cavender Creeks

East Fork-Bradley & Jarman Creeks

##### SOURCES

siltation/pastureland

habitat alteration/pastureland

siltation/pastureland

habitat alteration/pastureland

organic enrichment/pastureland

habitat alteration/pastureland

siltation/pastureland

habitat alteration/agriculture

siltation/pastureland

organic enrichment/pastureland

habitat alteration/pastureland

## SUBWATERSHED ROTATIONAL PLAN

The Stones River watershed is not currently receiving 319 funding. If an agricultural related project is initiated, it is probable that it might be the only of its kind as the watershed has undergone residential and commercial growth during the past several years. More than likely, the emphasis will quickly shift from agriculture to construction and urban runoff. Many of the impaired streams are in highly urbanized subwatersheds.

The TDA-NPS Program staff has intentions of meeting with the county commission, SCD Board, and other county and city officials to discuss future projects. Preliminary meetings have been held, so it is hoped that in the not too distant future 319 projects will be initiated to address the major nonpoint source issues of the watershed.

## COOPERATING PARTNERS

#### Partners

Local contractors & home builders

Local landowners

Rutherford County government

Rutherford County Soil Conservation District

Tennessee Department of Agriculture

Ag Resources Conservation Program

#### Abbreviations

SCD

TDA -ARC

### **3.2 CUMBERLAND RIVER STONES RIVER – EAST FORK**



Tennessee Department of Environment & Conservation	
Division of Water Pollution Control	TDEC-WPC
Division of Water Supply	TDEC-DWS
Ground Water Management Section	TDEC-GWMS
Tennessee Department of Health	
Division of Lab Services	TDH-DLS
Tennessee Home Builders Association	THBA
U.S. Department of Agriculture	
Natural Resources Conservation Service	USDA-NRCS
U.T. Institute of Agriculture	UTIA
U.T. County Technical Assistance Service	UT-CTAS

#### **Local contractors & home builders**

Rutherford County is rapidly growing with many rural areas becoming sub-urbanized. Agricultural-related problems are giving way to construction and urban runoff problems, an issue, which can be minimized if developers, contractors, and home builders make the effort to eliminate sediment loadings and high stormwater discharges.

Much of this area will fall within the NPDES phase II regulations, but the TDA-NPS Program has coordinated with the local planning commission to introduce nonpoint source technologies prior to the 2003 NPDES start-up.

#### **Local landowners**

Landowners will be requested to participate in the implementation of BMPs by allowing the BMP to be placed on their property, contributing to the construction of the BMP through in-kind services, and maintaining the BMP for an indefinite period of time. These same landowners will also be required to allow others to visit the BMP once it has been fully constructed.

#### **Rutherford County government**

As Rutherford County residential and commercial growth takes the remaining farmlands of the Stones River – East and West Fork watersheds, its officials and residents will need to remain aware of and protect the existing BMPs that have been installed. Developers, government officials, and landowners will also need to adopt the water quality stewardship demonstrated by the preceding farmers as they go about constructing the new developments.

#### **Rutherford County SCD**

The Soil Conservation District is an active partner in the effort to reduce nonpoint source pollution to the local waters. The SCD can provide a significant amount of financial assistance to local water quality efforts. Through its direct interaction with the local NRCS district conservationist, the SCD can also direct technical as well as administrative assistance to local water quality projects.

The SCD also serves as a leader in the effort to increase water quality education of the local citizens and operators.

**3.2 CUMBERLAND RIVER  
STONES RIVER – EAST FORK**



## **MONITORING & ASSESSMENT**

TDEC-WPC five-year watershed management approach  
TDH-DLS 319 monitoring

## **MEASURES OF SUCCESS**

- UWA projects have been implemented in all 303(d) listed subwatersheds with a large portion of the required pollutant source sites having been addressed.
- Post BMP implementation monitoring results are indicating an overall improvement of the water quality of the streams directly affected by BMP implementation.
- The subwatersheds once 303(d) listed have been removed due to sufficient water quality improvements.

## **MILESTONES**

### **Long Term Goal 1.**

***Hold regularly scheduled meetings with stakeholders, to create new partnerships, strengthen existing partnerships and to foster greater trust, commitment and accountability.***

- **Action:** Conduct an annual priority watershed partners meeting for project coordination.  
**Lead:** TDA-NPS Program  
**Key Partners:** TDEC-WPC; USDA-NRCS; TDH-DLS; SCD; local governments  
**Year(s):** 2001-2005
- **Action:** Develop a Watershed Restoration Action Strategy.  
**Lead:** TDA-NPS Program  
**Key Partners:** TDEC-WPC; USDA-NRCS; TDEC-DWS-GWMS  
**Year(s):** 2001

**3.2 CUMBERLAND RIVER  
STONES RIVER – EAST FORK**



**Long Term Goal 3.**

***Restore all waters impaired by nonpoint sources that are listed on the 1998 303(d) List to the condition of fully supporting their designated uses by 2015, in cooperation with local, state and federal partners.***

- **Action:** Twenty percent of the needed agricultural BMPs will have been implemented in the Stones River - East Fork subwatershed.  
**Lead:** SCD and local governments  
**Key Partners:** USDA-NRCS; TDA-NPS Program  
**Year(s):** 2005
- **Action:** Twenty percent of the subwatersheds will be fully supporting their designated uses due to BMP implementation in the Stones River – East Fork subwatershed  
**Lead:** SCD; USDA-NRCS and local governments  
**Key Partners:** TDA-NPS Program  
**Year(s):** 2005

**Long Term Goal 5.**

***Improve the knowledge of stakeholders and citizens concerning the origins, magnitude, and prevention of nonpoint source pollution.***

- **Action:** Develop at least two educational projects to educate the local citizens, landowners, and elected officials in the Stones River – East Fork subwatershed.  
**Lead:** TDA-NPS Program  
**Key Partner:** TDEC-WPC; USDA-NRCS; SCD and local governments  
**Year(s):** 2005

**Long Term Goal 7.**

***Use the maximum allowable percentage of funding annually to assist partners with water quality monitoring and assessment, for the duration of the 319 program.***

- **Action:** Pre-BMP implementation monitoring will have been completed in the Stones River – East Fork subwatershed.  
**Lead:** TDEC-WPC and TDH-DLS  
**Key Partners:** TDA-NPS Program; local governments  
**Year(s):** 2005